



DERMATOPATHOLOGY

## A NODULAR HIDRADENOMA OF ATYPICAL LOCATION IN PREGNANCY

Chen Yao<sup>(1)</sup> - Michael G Swaby<sup>(2)</sup> - Michael R Migden<sup>(3)</sup> - Sirunya Silapunt<sup>(4)</sup>

University Of Texas Mcgovern Medical School At Houston, ., Houston, United States<sup>(1)</sup> -  
Adg Pathology, ., Houston, United States<sup>(2)</sup> - University Of Texas-md Anderson Cancer  
Center, Departments Of Dermatology And Head & Neck Surgery, Houston, United States<sup>(3)</sup> -  
University Of Texas Mcgovern Medical School At Houston, Department Of Dermatology,  
Houston, United States<sup>(4)</sup>

**Background:** Nodular hidradenomas (NH) are benign tumors that arise from eccrine adnexal structures. NH are commonly located on the head, neck, and anterior trunk, with lower extremities being an atypical site. NH exacerbation in pregnancy is rare and raises possibility of cytological changes occurring secondary to hormonal fluctuations.

**Observation:** A 36-year-old Hispanic woman, gravida 6 para 6, at 31 weeks gestation of pregnancy presented with a tender nodule on her right medial lower leg that was stable for 2 years but enlarged during pregnancy. There was no trauma to the area. Physical examination revealed a well demarcated, dome-shaped brownish nodule measuring 10 x 15 mm. There was no regional lymphadenopathy.

Pathology showed a well-circumscribed solid-cystic dermal tumor consisting of a solid sheet-like arrangement of eosinophilic, polyhedral and clear cells. The tubular and cystic structures are filled with homogeneous eosinophilic material. Atypia, invasion, necrosis, and mitoses are not observed. Immunohistochemical studies showed tumor cells positive for CK7 and EMA, and negative for RCC, PAX8, CEA, and CD10. Tumor cells were also diffusely positive by PAS stain. These findings were consistent with nodular hidradenoma.

Due to its benign nature, surgical removal was postponed until after delivery when the tumor was excised with a 3 mm margin. There was no recurrence at 12 month follow-up.

**Key message:** Our case involved an atypical location on the leg. In a 10-year review of 89 NH cases, 4 were located on the legs. Pregnancy is known to increase eccrine activity. Our case suggests that pregnancy can contribute to the growth of eccrine sweat apparatus tumors, but this relationship has not been elucidated. Due to high recurrence rate, biopsy and surgical excision are warranted with follow-up to monitor for recurrence as malignant transformation has been known to occur.

